

THE  
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, DECEMBER 29, 1870.

[VOL. VI.—No. 26.]

Original Communications.

CASE OF FOREIGN BODY IN THE AIR-PASSAGES.

By O. W. DOB, M.D., Boston. Read before the Boston Society for Medical Observation, Nov. 21, 1870.

ELLA F., twenty-eight months old, a short, stout, fleshy child, on the 18th of August last, was sitting on the round of an old-fashioned wash-bench, according to the report of a playmate, holding tightly the head of a shawl-pin between her teeth and snapping the point of the same with her finger. On changing her position, to sit upon the top of the bench, she fell backwards, striking with considerable force upon the back of her head. Her mother, alarmed by the cries of her companion, immediately proceeded to the scene and found her lying in the arms of a young girl, rigid, face deeply congested, violently coughing and gagging, and constantly moving her head from side to side and carrying her hands to her neck. She once attempted to pass her finger down her throat. The mother examined her throat, but saw nothing indicative of the trouble. A physician was immediately summoned, and found the child lying on a sofa, pale and exhausted, with a short, hacking cough. He stated to the parents that the pin had probably passed into the stomach, and advised that the patient be kept as quiet as possible, and to await future developments. At this time the mother noticed that the least motion of the child's head would excite coughing.

The accident happened at about 4 o'clock in the afternoon, and at half-past 5, the distressing symptoms having subsided, the patient ate heartily of thick tripe and mashed potatoes, having taken nothing previously since morning, excepting bread and milk. She presented no apparent difficulty in swallowing, but was noticed to drink very often of water and to cough after each act of deglutition.

Just previously to finishing her meal, she was seized with a violent fit of cough-

VOL. VI.—No. 26

ing, and presented the same symptoms as have been described as taking place at the time the accident occurred. The paroxysm continued for nearly ten minutes, and was terminated by expectorating about a drachm of bright arterial blood. No food was vomited. The patient immediately fell into so heavy a sleep that moving her from one room to another did not awaken her. At this time her breathing was so quiet and slow that she was thought to be dying. During the night she rested well, and on the following day seemed as well as usual, excepting that her countenance had a pale bluish tinge. She ate heartily of brown bread and beans, played about the house, and in the afternoon went down the street to meet her father. Towards evening she became dull and listless, fever supervened, and she soon fell asleep. During the evening her breathing became loud and stridulous; skin extremely hot, and the subsequent symptoms, as described by her mother, were those of laryngismus stridulus, which abated towards morning, but did not wholly disappear till the middle of the next day. At that time a surgeon was consulted, but no special treatment was advised. That afternoon the patient again became very feverish, and thus continued for twenty-four hours, when vomiting supervened and lasted until midnight, everything being rejected as soon as taken. The fever subsided on the accession of the vomiting.

On the morning of the fifth day she seemed perfectly well, ate heartily and played out of doors. In the forenoon, she had a paroxysm of coughing, more severe than any that had preceded, after which she fell into a deep sleep, apparently perfectly exhausted. During sleep her mother noticed a "drawing up," as she expressed it, of the space beneath the left clavicle, perceptible on the application of the hand, and also a whistling sound apparently arising from the same region, and heard distinctly when the ear was considerably removed from the chest. In the afternoon, the surgeon previously referred to was again called in consultation, and made a thorough examination of the chest. He informs me that no-

[WHOLE No. 2239]

thing definite was discovered; no evidence, as far as he could determine, of either local or general disease.

On the sixth and seventh days after the accident she seemed perfectly well, and played out of doors the greater part of the time, but suffered from a frequent hoarse cough at night.

On the ninth day, another severe paroxysm supervened, followed, as previously, by a heavy sleep; and, on awaking, she was unable to utter the faintest sound. This aphonia continued for half an hour, and during this time there was considerable dyspnoea. Paroxysms of coughing, followed by high fever and sleep, were noticed to occur about every second day, from the effects of which the patient was gradually losing flesh, and very frequently there were noticed dark-blue circles about her mouth and eyes. Attacks of dyspnoea now occurred nearly every night, and a short cough, occasionally noticed during the preceding three or four days, had gradually increased in frequency. Notwithstanding these symptoms, the child continued about her play as usual.

I saw the patient for the first time twelve days after the accident occurred. At that time she seemed bright and playful, and to one unacquainted with the previous history no suspicion of disease would have suggested itself. Her appetite and general condition seemed unimpaired. The only rational symptom noticeable was the short, loose cough above mentioned. On making a physical examination of the chest, loud, sonorous and mucous râles were distinctly heard, even before the ear was brought in contact with the skin, throughout the whole front and back of both lungs. Nothing in the physical signs would suggest, and much less locate, a foreign body either in the bronchi or pulmonary substance. I ordered a simple stimulant expectorant, and advised that nothing further should be done until the bronchitis had somewhat subsided, as the patient was comparatively easy and there being no indication of immediate danger.

Three days later, I visited her again and found her sleeping, after a hearty play. Soon awaking, I made a second examination of the chest, but found the condition of the lungs the same as on the previous examination.

On the nineteenth day of her sickness I was summoned in great haste, and found the child in convulsions. From the mother I obtained the following history. There had been no development of new symptoms or any

change in her condition from the time I last saw her, until about two o'clock that day. At that time, while playing with her rocking-horse, she suddenly choked, as she was calling to a playmate, and in a moment became perfectly rigid. When her mother reached her she was in convulsions, her face deeply livid, and, from her mother's description, there was marked opisthotonos. Convulsions occurred about every ten minutes from two until about half-past six. When I saw her, at half-past five, she was lying on her back, perfectly unconscious, pupils widely dilated, frothing at the mouth, and generally convulsed; convulsions were of a clonic character, and much more noticeable on the right side than on the left. In the interval between the convulsions there was no return of consciousness. I gave her, as soon as it could be procured, two grains of the yellow sulphate of mercury. This was taken about six, P.M., and produced free emesis. Consciousness soon returned, and at eight, P.M., the patient was able to speak. During the night she slept quietly, and on the following day the only marked symptom was exhaustion. After this the paroxysms of coughing occurred frequently during the day, and were noticed to take place whenever the child inclined her head far forward.

On the afternoon of the twenty-first day of the disease, the patient suddenly became quite hoarse, and soon after complete aphonia ensued, which continued for four hours. When the voice returned, it was of a distinct croupy character, and the patient was noticed to shrink on accidentally touching the cervical region. The following morning the respiration had become labored, and the voice greatly muffled and indistinct; mucous and sonorous râles were heard abundantly over the whole front and back of the chest. The treatment consisted in warm applications externally to the throat, in administering an emetic of turpeth mineral whenever necessity demanded, and in keeping the air of the room constantly moist with steam containing the vapor of slacked lime. Inhalations of lactic acid were advised, but were not satisfactorily given. The patient refused all nourishment, and any attempt to force it was succeeded by such violent coughing and strangling as to excite fear in regard to the immediate result, and they were consequently desisted from. The symptoms continued to increase in severity, so that on the fourth day after the attack her pulse had become extremely weak and irregular, respiration painfully labored, and the voices scarce-

ly perceptible. All efforts to give nourishment by enemata were also relinquished, for the same reasons as stated above. At this time the patient coughed up a piece of membrane, which the mother reported as nearly four inches in length. From this period the symptoms appertaining to the throat steadily improved.

The next morning, although the voice and labored respiration had greatly improved, I found the patient in a very high fever and with a rapid pulse. On examination of the chest, I found distinct bronchial respiration throughout the upper third of the right lung; elsewhere were heard the loud mucous and sonorous râles reported at the first examination. She passed through a regular course of pneumonia, and, on the sixth day of the disease, to all appearances was dying; the pulse was extremely feeble, extremities cold and livid, countenance pale and pinched. At the request of friends, Dr. Aiken saw the patient with me, but advised nothing, as he considered her in *articulo mortis*. Up to this time the patient had taken no form of nourishment for ten days.

On visiting the house the next morning, instead of finding my patient dead, as I expected, she was sitting up in the cradle playing with her dolls, and to all appearances as bright as when I was first called to her, excepting her pallor of countenance. She had partaken freely of milk just previously to my arrival. On examining her chest, to my great surprise nothing abnormal was heard, excepting sub-crepitant râles where previously existed the bronchial respiration.

The following day respiration was less easy, and there was evidence of returning mucous and sonorous râles. Late in the afternoon, I called in Drs. Aiken and Cheever, to consult with reference to an operation for the extraction of the pin, and it was decided that an attempt should be made. As there was no immediate danger it was proposed to wait until the following afternoon, unless necessity demanded an earlier interference. Accordingly, on the following day, thirty-three days after the accident occurred, at 4, P.M., the patient was etherized and the operation performed by Dr. Cheever. An incision, extending from immediately below the cricoid cartilage to the upper border of the sternum, was made through the skin and superficial fascia, and the sterno-hyoid and sterno-thyroid muscles separated, avoiding the thyroid plexus of veins. Not more than half a drachm of blood was lost in reaching

the trachea, which being freed for a short space from the surrounding tissues and firmly held, an incision was made sufficiently large to admit the forefinger; this was succeeded by frequent attacks of coughing, attended with an ejection of a quantity of mucus. Explorations were made with long, narrow, curved forceps and probe, extending into the larger bronchi. The finger was also passed up to the epiglottis, but nothing was discovered. About ten minutes after the trachea was opened, and after a very thorough exploration was made, the patient gave a forcible cough, and the point of the pin was seen to strike the internal wall of the trachea at the edge of the incision, and was immediately seized by the forceps and extracted. The pin was a medium-size shawl-pin, an inch and a half long, with a glass head. The patient recovered shortly from the ether, and seemed to take a lively interest in what was passing around her. Cold-water dressing was constantly applied to the wound, the air of the room kept moist and the temperature at 78° Fah. The patient slept well during the night, except when disturbed by coughing, at which time a free discharge of stringy mucus would take place through the wound. From this time the patient partook freely of liquid food.

Four days after the operation the trachea had closed over, so that no air passed through the artificial opening, and on the tenth day the external wound had entirely cicatrized. The patient made a speedy and perfect recovery, with no untoward symptom, except a slight attack of catarrhal croup on the sixth night.

In searching carefully the American and English medical journals, I have been able to find only four cases where tracheotomy has been performed for the removal of either a pin or needle, but a great number for the removal of other foreign bodies of a diversified character.

Dr. W. H. Van Buren, of New York, reports a case operated on by Prof. Mott, where a child, nine months old, was suddenly seized with fits of coughing and strangling, while in the nurse's arms, without any assignable cause. Paroxysms of suffering continued undiminished, with occasional intervals of comparative ease, until the third night, when, suffocation threatening, tracheotomy was performed, and a shawl-pin, two inches in length, was found fixed opposite the wound, with the glass head directed downwards. The child made a rapid and perfect recovery.

In the American Journal of Medical Sci-

ences, Vol. iv., there is a case reported where a needle accidentally slipped into the nose of a man, 24 years of age, from which it passed into the pharynx, and, finally, into the lung. At the end of the fifth day, laryngotomy was performed, and an attempt made to remove the foreign body by forceps, but so much irritation was induced as to cause the operator to desist. The wound was covered with a perforated compress spread with cerate. The next morning, the pin, an inch and a half in length, was found in the dressing. The symptoms in this case were remarkable hoarseness, dysphagia, frequent cough, and almost entire aphonia. The patient recovered, but his voice remained hoarse and feeble for several months.

In the same journal, for 1869, Dr. J. C. Reeve, of Dayton, Ohio, reports the case of a girl, 8 years of age, to whom he was called in the night, who stated that she had swallowed a shawl-pin. Inspection of chest showed that the left side did not expand on inspiration, and that the respiratory murmur was entirely absent on that side. As the symptoms were not urgent, the operation was postponed until the following day. At the time of the operation, a great quantity of blood was lost, and her condition became so critical that the pin was forcibly withdrawn by bending it out of the incision. In this case a tube was worn for forty-eight hours lest the swelling from the injury to the parts might interfere with respiration. The pin measured three and three-fourths inches in length. The patient made a perfect recovery.

In the Boston Medical and Surgical Journal for 1861, Dr. G. W. Chittenden, of Janesville, Wis., reports a case where a pin passed into the trachea of a young lady, and lodged between the thyroid and cricoid cartilages in a transverse position. Tracheotomy was performed, and the forceps applied to the pin, but in the effort to extract it the instrument lost its hold, and the pin was ejected with the mucus, which was forced out through the artificial opening during the severe coughing which followed. The patient made a rapid recovery.

These five cases, which I have reported, all recovered; but, unfortunately, this success does not attend all cases of tracheotomy for the removal of foreign bodies.

Dr. Gross, in his work on Foreign Bodies, which contains a tabulated report of all cases recorded up to the year 1853, and in which the offending substances were exceedingly diversified in their size, shape, and composition, gives forty-eight cases

where spontaneous expulsion took place without an operation, followed by recovery; and eight in which death resulted, two being from exhaustion, and six from pulmonary disease. A piece of bone was retained sixty years, and then expelled by coughing.

In seventeen cases of laryngotomy, thirteen recovered, although in four of these the foreign body was not expelled for some days after the operation, and four died, one from exhaustion and three from non-removal of the offending substance.

In sixty-eight cases of tracheotomy, only eight deaths are reported, and in only forty-one of those that recovered did the expulsion of the foreign body take place immediately: the time of the others varied from one to forty-seven days, and in only nineteen was the body removed by instruments at the time of the operation. In five of the eight deaths which resulted, the foreign body was not expelled; of the three in which it was removed, one death occurred from pulmonary disease eight months after, one from entrance of blood into the trachea, and the cause of the third was not stated.

In thirteen cases of laryngo-tracheotomy, ten recovered, and three died. In only four of those that recovered was the foreign body expelled at the time of the operation; the time intervening between the operation and the expulsion of the others varied from one to three days. In only half of the cases was the substance removed by instruments.

Of the three deaths, two resulted from the retention of the foreign substance, and the other, on the fifteenth day, from bronchial obstruction.

In the preceding statistics given by Dr. Gross, the percentage of deaths without operation is 16 $\frac{1}{2}$ : after operation, 18 $\frac{1}{2}$ . The apparent discrepancy here arises from the fact that only the severer cases came to an operation.

In all cases of tracheotomy for the removal of foreign bodies, the success of the operation does not depend so much on the immediate removal of the substance with the aid of instruments, as in forming an artificial opening, through which the foreign body may be expelled by the voluntary efforts of the patient.

**OPIMUM EATING.**—In a late number of the *Philadelphia Medical and Surgical Reporter*, Dr. Scheitzer, of Baltimore, relates the case of a lady, 28 years of age, who had consumed in two years 5840 ounces of laudanum.—*Cincinnati Medical Reporter*.



## DEFECTS OF OCULAR REFRACTION, &amp;c.

(Concluded from page 412.)

## LECTURE V.—Myopia.

Myopia may be defined as that state of refraction in which the far-point is at a finite distance in front of the eye. Such an eye does not see distinctly beyond a certain distance, while it may have perfect vision for nearer objects. In the absence of accommodation rays emanating from the far-point come to a focus on the retina; rays emanating from a nearer point may, with the help of the accommodation, also come to a focus on the retina. But rays emanating from a point more distant than the far-point, as, for instance, parallel rays, come to a focus in front of the retina. If we consider that the object of the refraction is to bring the focus to the retina, it may be said that in the myopic eye the refraction is too strong relatively to this object; is stronger than in the emmetropic eye. Here we see another property of the myopic eye, viz.: that the distance of the retina behind the cornea is greater than the distance of the second principal focus from the cornea. If this latter were the same as in the emmetropic eye, then the myopic would be longer than the emmetropic. And in fact it is found that anatomically the myopic eye is often, if not generally, longer antero-posteriorly than the emmetropic. This enlargement, in view of its causes and consequences, is quite as important as regards the appreciation and treatment of myopia as the characteristic optical condition is.

The amount of accommodation as measured by Donders's formula is about the same in myopia as in emmetropia, but the region is quite different and smaller. Suppose the accommodation equal to  $\frac{1}{4}$ . Then in emmetropia the region would extend from very distant objects to those only 8 inches from the eye; while with the same amount of accommodation in myopia  $\frac{1}{4}$ , the region would extend only from objects 8 inches off to those 4 inches off.

We saw, when considering presbyopia, that myopics need convex glasses to correct their presbyopia, if at all, not so early in life as emmetropics, as they are already provided with a relative excess of refractive power. "Up to the sixtieth or even the seventieth year of our age, not to need spectacles, in order to see accurately whatever comes immediately under our eye, is a great privilege. This privilege belongs to myopia of from  $\frac{1}{4}$  to  $\frac{1}{8}$ , in which de-

gree the eye is not threatened with any special dangers."

With regard to the diagnosis of myopia the methods by the ophthalmoscope have been previously described. We may also recognize it by testing the patient's vision. If an eye can distinguish No. 1. of Snellen's letters at one foot, but cannot read No. XX., which is twenty times as large, at twenty feet (supposing no accommodation active), it is myopic. The retinal pictures in the two cases, if distinctly formed, would be very nearly of the same size. The ability to read in the one case and not in the other would indicate a defect in the range of optical adjustment, and in the case supposed, myopia.

Again, suppose no accommodation active, and the media to be clear. Then if vision for distant objects is improved by a concave glass, and if the vision is brought up to the normal amount, then we have myopia; if improved, but if it cannot be brought up to the normal amount, then some myopia, but also some other trouble, as disease of the fundus oculi or astigmatism. The effect of strong concaves to diminish the size of the retinal images must be remembered.

If the media are not clear a concave may improve distant vision, even though no myopia; because such a glass requires accommodation, which is accompanied by diminution of the pupil and this latter may improve the vision in the case supposed.

Also, we must not be content with the statement of the patient that he sees better; he must prove it by reading smaller letters.

In testing for myopia we should bear in mind that it may be complicated with astigmatism; this latter, if present, should be recognized and corrected, as if uncorrected, it has been thought to increase the myopia.

Myopia should be distinguished from conical cornea, or irregularly projecting cornea, which presents symptoms of myopia combined with amblyopia. The irregular prominence with often a slight opacity at its summit can generally be seen on careful inspection.

Cataract in children sometimes simulates myopia, and might occur in connection with it. The cataract is easily recognized by oblique focal illumination, or with the ophthalmoscope.

Mere opacity or cloudiness of the cornea must not be mistaken for myopia.

The measure of the amount of myopia

\* Donders. On the Anomalies of Accommodation, &c. P. 213.

depends conventionally on the distance in inches of the far-point from the eye. If this distance is 12 inches, the myopia is  $\frac{1}{12}$ ; if the distance is 4 inches, the myopia is  $\frac{1}{4}$ ; the amount is greater as the far-point is less distant.

The amount of myopia may be determined for each eye separately by the weakest concave glass which under atropine gives the best vision of distant objects. An indication of this glass is given by the far-point for reading ordinary print, or, if the myopia is slight, larger print. If atropine is not used, as is often the case, we must be very careful not to estimate the myopia too high.

The amount of myopia may also be determined by the ophthalmoscope, being indicated by the weakest concave which allows a distinct view of the upright image.

As to the cause of myopia, while it might possibly depend on differences in the form of the surfaces bounding and separating the refractive media of the eye, and upon differences of the densities of these media, it is now believed to depend in fact generally on the increased length of the eye antero-posteriorly, this having been frequently demonstrated in cases of the anomaly.

This defective oval shape or diseased enlargement is very frequently accompanied by marked pathological changes in the interior parts of the eye, and in the sclerotic, such as atrophy of the choroid, thinning of the sclerotic and others. These changes have by some been attributed to an inflammatory disease called sclerotic-choroiditis posterior, which has been looked upon as the chief cause of the distention and prominence of the posterior part of the eye-ball, or of the *posterior staphyloma*.

On the other hand the disease, sclerotic-choroiditis posterior, may be looked upon rather as the result of the increasing distention of the choroid and sclerotic, this distention being due primarily to a congenital weakness of the tissues, and subsequently in part to over-use of the accommodation, and in part to the excessive convergence required in myopia and to mechanical difficulties connected with the movement of the oval eye-ball. A defective elongation of the eye may even be congenital.

These two views do not exclude each other. The distention of the membranes may give rise to irritation and inflammation, and these latter may in their turn promote the distention. Myopia is very often hereditary, and sometimes congenital.

One of the intra-ocular changes referred to, and one which is almost invariably seen with the ophthalmoscope in high degrees of myopia, is an appearance by the side of the nerve-disk of a somewhat crescent-shaped, light-colored spot, where the choroid is atrophied and allows the lighter color of the sclerotic to show itself through. This spot may be explained as depending on choroidal atrophy caused by the distention of the choroid and sclerotic, or as due to a congenital want of development. The middle of the crescent does not always correspond with the apex of the staphyloma. This crescent, though generally accompanying the higher degrees of myopia, would not of itself prove the presence of the anomaly, for a similar appearance is sometimes found without myopia.

As to the relation of the crescent to the other similar changes in the fundus, some authorities consider the latter as an extension of the crescent; but by others a distinction between them is made, inasmuch as the crescent is not always accompanied by inflammation; sclerotic-choroiditis being then understood to involve changes in the fundus more extensive than the crescent, besides changes in the vitreous and consecutively in other parts. They occur, however, often together, and eyes with the atrophic crescents are by some observers considered more liable to the other changes.

If myopia is to be developed at all, it generally shows itself in youth, and is liable to increase subsequently. This increase may in favorable cases be comparatively little, or the anomaly may, though very rarely, decrease a little late in life. Such cases occur for the most part among the low degrees. They have given rise to the expression *stationary myopia* as distinguished from the more progressive forms.

Sometimes the disease, after temporarily progressing, as for instance till about the thirtieth year, may then become stationary.

In the higher degrees the increasing distention of the posterior membranes causes the myopia to increase more and more, till finally the eye may lose all useful sight. Besides the optical difficulty from the far-point approaching so close to the eye that it is not able to see distinctly at a greater distance than two or three inches, the retina, also, in consequence of the distention of the membranes, becomes seriously affected both at the macula lutea and elsewhere. Extravasations of blood from choroidal vessels may occur just beneath the macula lutea. The retina may be extensively separated from the choroid by serous

effusion, or choroidal hæmorrhage. Glaucoma may supervene; other lesions less serious may occur, such as opacities in the vitreous and cataract. The lesions mentioned, however, are not peculiar to myopia.

The difficulty of convergence of the myopic eye, owing to its oval shape, taken in connection with the circumstance that unless glasses are used, a greater convergence is often required, may give rise to fatigue and insufficiency of the internal recti muscles, which may result in divergent strabismus. The divergence may perhaps be sometimes promoted by a relaxation of the efforts to converge in order to avoid the accompanying increase of accommodation.

Graefe has taught that where insufficiency of the internal recti is present, the myopia is especially liable to increase, owing to the pressure and congestions accompanying the increased efforts to converge; and advises under certain circumstances the tenotomy of one or both external recti with a view to facilitate the convergence and thereby guard against the increase of the myopia.

In the higher degrees of myopia, when the serious complications mentioned have set in, the course of the disease can hardly be checked. It is, therefore, of the utmost importance to look at its first beginnings, and in this regard observation shows that a principal cause of myopia is the prolonged use of the eyes on too near objects in childhood and youth. Such use of the eyes involves excessive exercise of the accommodation and of the convergence, with the accompanying vascular congestion and increase of internal pressure; and from these results a yielding of the tissues, naturally less resisting in childhood, even if no hereditary predisposition to such yielding exists. A bending forward of the head promotes congestion of the eyes and so increases the internal pressure.

Whatever leads to such imprudent use of the eyes, especially in childhood, is to be looked upon as a cause of myopia and avoided; for instance, insufficient light, inconvenient seats and desks which may induce the bending forward of the head, overtasking of the children—against which of course there are other reasons more important than the danger of myopia—fine print, especially as often found in dictionaries and on maps.

The complication of astigmatism, by calling into play the accommodation in vain attempts to neutralize it, and owing to the diminution of vision causing the book or

work to be brought nearer the eye, has been thought to favor the increase of myopia.

As to glasses: a concave  $\frac{1}{2}$ , neglecting the distance between the glass and the eye, will adapt a myope of  $\frac{1}{2}$  for parallel rays, or for distant objects. In using such a glass for distant objects there seems to be no danger, if we have correctly estimated the myopia—that is, not too high.

But may the same glass be used for reading, sewing, &c.? This would require the action of the accommodation; but also, even without the glasses, such a myope will often accommodate and read at a less distance than 12 inches, and thus incur the danger of too much convergence. So that, on the one hand, if he uses the glasses ( $-\frac{1}{2}$ ) for reading, he must accommodate. This in a healthy eye is perfectly natural. But in a diseased eye, as the myopic often is, it has been thought that the action of the accommodation, considered as involving increased intra-ocular circulation and pressure, may be injurious. On the other hand, without the glasses, there is danger of too much convergence. In either case a certain amount of injury is to be feared.

A comparatively safe mean course is to give for distant objects glasses which do not quite correct the apparent myopia (as there may have been some action of the accommodation causing the myopia to be overestimated); and for reading or sewing, weaker glasses, sufficient to remove the far-point to about 18 inches, supposing of course the myopia so great that without glasses the danger of too much convergence is incurred.

In considering more nearly the use of concave glasses, we may distinguish, as regards comparatively young persons, between the cases where the same glass which corrects for distant objects can also be worn for near objects, and those in which this cannot be done. In advanced life, after the range of accommodation has become small, the same glass will not suit for very different distances.—We must also notice the case of a very slight degree of myopia, and that of a very high degree with diminished acuteness of vision. We must bear in mind that strong concaves diminish the size of the retinal images; and that the question presenting itself is not merely what concave will carry off the far-point to the desired distance, but also, among others, whether, considering the diminished size of the retinal images, the eye has sufficient visual acuteness to see clearly through the required glass the object at the desired dis-

tance. The possibility of the eyes not being able to maintain easily the desired convergence must also be remembered. For the recognition and treatment of the latter condition we must here refer to the very elaborate and minute teachings of Graefe on insufficiency of the internal recti.

The following more detailed directions as to the selection of glasses are taken from Donders.

"When the myopia is slight, in reference to the range of accommodation, and the eye is otherwise healthy," the glass which corrects the myopia for distant objects may also be worn for near objects. "Glasses of  $-\frac{1}{2}$ , adopted at 17 years of age are often still sufficient at 45, both for seeing acutely at distance and for ordinary close work." "The myopia thus neutralized is less progressive, because both too strong convergence and a stooping position are avoided. But if the tendency to these is so great that they still occur in neutralized myopia, the use of glasses is dangerous, and must be discontinued so soon as it appears that the myopia is particularly progressive. In this case it is necessary for a time to forbid all close work."

"In order to obtain all the advantages of concave glasses the myope must begin early with them."

"If neutralizing glasses, or nearly such, have not been worn from youth, the relative accommodation becomes such that in moderate degrees of myopia, for example of  $\frac{1}{8}$ , we can no longer completely neutralize at 35 years of age. We should then confine ourselves to glasses which bring  $r$  (the far-point) to about 24 inches, giving, if necessary, still weaker ones for working."

If neutralizing glasses cannot be used, that is, if glasses corresponding to the degree of myopia cannot be worn both for distant objects and for reading, we must give glasses for particular distances; bringing the far-point to the distance or a little beyond the distance of the objects.

"In very slight degrees, from  $\frac{1}{8}$  to  $\frac{1}{4}$ , we may leave the myope to himself;"

"In the highest degrees, from  $\frac{1}{2}$  upwards, perfect neutralization is not pleasant for close work, because, with regard to the usual diminution of the acuteness of vision, the images become too small. We should then rather bring  $r$  (the far-point) to 12 or 16 inches."

If inflammatory complications supervene, attended with irritability, pain, subjective appearances of light, apparent increase of myopia and diminished vision, it will be

necessary to lay aside the glasses, rest the eyes, and shade them from the light; to avoid stimulants and fatigue; to look after any defect of the system; sometimes it is useful to apply the artificial leech to the temples, followed by a stay in the dark for 24 hours, with application of atropine to the conjunctiva, and a gradual return to the light. In the complication of glaucoma, Graefe has advised iridectomy.

#### OUR BLUNDERS AS STUDENTS.

By L. F. C. GARTIN, M.D., Lonsdale, R. I.

Among the three or four hundred students of medicine now assembled at Harvard, there is a class to whom I wish to say a few words—to give "advice without medicine." I refer to those who, aside from two winter courses at Harvard, are to pass their pupilage in the offices of country practitioners, and who are now entering upon their first lectures with the desire of realizing from them the greatest benefit possible. This comparatively small number is singled out from the rest, because a few years ago I was in their position, and because I then committed or observed many mistakes which a timely word of warning might have prevented. Experience may be the best schoolmaster, but he who profits by the experience of others is the best scholar.

While it is too late to recommend to you a scheme of preparatory study, yet I certainly consider him fortunate who is already well grounded in the text books of anatomy and physiology. The error almost universal on the part of those who really mean work is an attempt to do too much in the short space of four months. A conscientious young man having paid for lectures in every department, as a necessity for graduation, is urged by motives of economy to attend all within his power. In those rare instances in which an iron constitution enables its possessor to keep well while listening to six or eight lectures daily, besides attending the other exercises of the school, an effect is produced equally as bad as bodily sickness. The student acquires a superficial knowledge of many if not all of the subjects treated. Impressions continuously repeated, without proper intervals during which they may become stereotyped, will afterwards be found indistinct and unreliable. The winter will fail of its anticipated fruits, because of the very eagerness with which they are gathered.

To be explicit, the first course of lec-

tures should not include obstetrics, theory and practice, skin diseases, mental hygiene, perhaps not even surgery. But in anatomy, materia medica, chemistry and morbid anatomy, not a lecture should be omitted.

Now does any one think this is omitting too much, and desert at that, from the generous bill of fare? Let us see. Anatomy, even if well studied beforehand, is not yet mastered—it cannot be away from the dissecting-room. The first, the second, and every course should have its full share of practical anatomy. A first-rate anatomist never makes a third-rate doctor. A proficient dissector is half way to being an accomplished surgeon. Indeed, every branch of the profession is dependent upon anatomy. The human body is to the physician as well as surgeon what the earth is to the geologist, or the firmament to the astronomer. If the foundation is rotten it is vain to hope to rear a satisfactory superstructure. For the student to gain a strong foundation, it is necessary for him to join the quiz, as a preparation for which some study is needed in addition to the teachings of the lecture-room. Thus a single primary subject claims about one-fourth of the whole winter's work.

Chemistry, to be of much value, must be accompanied by reference to the text book outside of lecture hours. Ignorance of practical chemistry is the great defect in country educated physicians, but the present is not the time to supply it. No student can consider himself educated in medicine until he has spent at least one term in a chemical laboratory. Such an opportunity is the greatest attraction of the summer school.

Materia medica must be added to the second, as well as the first winter's course, and the third, when taken, and full notes in this department must be preserved. My note book upon Dr. Clarke's lectures has no substitute in any or all the works upon materia medica and therapeutics, or upon theory and practice. With regard to taking notes no universal rule can be adopted. There is such a thing as attempting to keep too full a record. But no lecture, or exercise, should surprise you without means of jotting down upon the spot the crystallized experience of Harvard's excellent instructors. To the chair of morbid anatomy this remark is especially applicable.

Beside the lectures proper, there are privileges peculiar to cities, schools and hospitals, of which you must especially avail yourselves.

VOL. VI.—No. 26A

The theory and practice of medicine and surgery, if not listened to in the lecture-room, may be studied at the bedside. Just as in learning a foreign language, there is no way of approaching medical science so pleasantly or naturally as on the practical side. Close observation of cases, of the mechanical treatment of fractures, of the dressing of wounds, of surgical operations, and finally exercise in auscultation and percussion, will prevent neglect of the more advanced branches. A word about how to do this in the best way. For the first few weeks of the lecture term there is a grand rush for the hospital wards, and each visit is crowded. If a student gets near one bed in three he is fortunate, if not selfish, but he soon finds that peeping at a patient ten feet distant between the heads and over the shoulders of others is not likely to give an intimate acquaintance with the case or the disease. With the approach of the winter solstice the numbers attending the morning visit at the hospital fall off. When the novelty is gone, and the first enthusiasm is cooled by hard work, many students at 8 A.M., find their own beds more attractive than those in the sick wards. The student will lose little, therefore, by neglecting the hospitals for the first month. Wait until sitting at lectures, the careful use of text books, and preparation for the quiz has by habit become easy. Then a visit to the wards will not only have novelty, but will be full of interest and instruction. Do not fear the long journey to the distant hospitals and dispensaries, even on rainy and snowy days. It is the best time to examine patients in the wards. A few cases well followed, their condition, from week to week, carefully watched and compared, are of more value than hundreds glanced at once. There are two classes of patients to which particular attention should be directed. One comprises diseases in which comparison is of great importance, such as affections of the eye and skin—subjects difficult of mastery in a country practice. The other class referred to are the cases soon expected to result fatally, including those of tumors, phthisis, &c. This implies that autopsies are to be attended. Keep advised as to their occurrence, especially if they happen at odd hours, when there will be plenty of time. It would be an unpardonable oversight to omit mention, in this connection, of the *clinical conference*. It is popular, and deservedly so. In no other way can the same amount of information be acquired by the student in an hour's time.



It would be useless to tell any of you not to go to operations, if experience had proved such a course best; but it must be borne in mind that this exercise is subject to the same universal law as the others. A few operations, thoroughly understood, are better than many only seen.

In conclusion, let me repeat the warning with which I began. Do not try to do so much in the first half of the course that the second half shall find you drained of energy and vitality. Go up hill instead of down.

#### RADICAL CURE OF ARTIFICIAL ANUS.

Translated from the *Gazette Hebdomadaire*, by  
F. W. DRAPEL, M.D., Boston.

M. GOFARD recommends a new method of operation for the radical cure of artificial anus. "The real indication to be fulfilled," he says, "is to prevent the escape of the intestinal contents between the lips of the opening." For this purpose a suture is passed near the margin of the orifice, so that it is placed deeply and draws together tightly the hardened and callous cellular tissue which forms the wall of the canal. The suture, which should be strong and smooth, is passed deeply from side to side, just below the lower extremity of the orifice; then subcutaneously a little distance, then back again to the other side, and so on until the opening of the anus is all involved in this series of transverse stitches; a second suture passed in the opposite direction, the same points of entrance and exit in the skin being observed, completes the circuit and enables the operator to readily appose and retain the walls of the fistula. The needle used is one of moderate curve, with the eye near the point. After the sutures are passed, the surface of the fistulous tract is thoroughly refreshed and its external edge is drawn together by an ordinary interrupted suture.

The writer concludes very candidly:—"The lesion is thus reduced to a simple wound, and we ought to expect union by first intention, if the general condition of the patient is good. Concerning the results of this method only conjecture is at present possible, since the confirmation of experience, without which all theories are good for nothing, is as yet absolutely wanting. One argument in its favor may, however, be offered; the patient is not obliged to undergo an operation, properly so called, and does not suffer any loss of tissue."

## Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 29, 1870.

#### THE RELATION EXISTING BETWEEN MOVABLE KIDNEYS AND HYSTERIA.

We have lately received several numbers of the *Medizinisch-Chirurgische Rundschau*, published in Vienna, a monthly review of current medical literature. Each number contains a short but full abstract of the principal articles of interest in the English, French, German, American and other medical journals, under separate heads for pathology and clinical medicine, pharmacology, therapeutics, surgery, midwifery, ophthalmology, physiology, anatomy, &c. This year's volume is the first of a new series, and it is valuable, as it contains extracts from many journals—Italian, Danish and Norwegian—which we do not usually see in this country.

In addition to the above-mentioned monthly retrospect, there is a department for criticism of new works and one for original communications. From the latter we make an abstract of an article by Dr. R. Chrobak on "Movable Kidney and Hysteria." On account of a remark made by Oppolzer in regard to the relations existing between movable kidney and hysteria as cause and effect, the author was led to a study of these two conditions, and had opportunity during three years to observe 19 patients with movable kidneys, 16 in Oppolzer's clinic and 3 others. Three times there were no subjective symptoms accompanying the anomaly. Eight times there was trouble which could be referred either to the dislocation of the kidney or to disease of the same, and eight times there were unmistakable symptoms of hysteria. In these eight there were found, besides the dislocation of the kidney, once supra-vaginal hypertrophy of the vaginal portion, with prolapsus; once, prolapsus vaginæ; twice, descent of the uterus; three times, flexions, with uterine and vaginal blennorrhœa.

Of the other two, one was a virgin of 27 years, who had a movable kidney on the right side and also a moderate catarrh of the vagina. After several weeks' treat-

ment the vaginal catarrh was cured, but nevertheless the patient still suffered from the symptoms of which she had previously complained:—intercostal neuralgia, megrim and globus hystericus; the other patient, 45 years old, with movable kidney on the left side, was seen only once; she had had several children, yet her genital organs were perfectly normal, and she could not remember having had genital disease at any time of her life. The beginning of her suffering—mental depression, heaviness, fullness in the abdomen, swelling of the abdomen, vomiting, cramps in the stomach, strong pulsation of the aorta, sensation of a girdle around the abdomen, megrim, hyperesthesia of the scalp—was clearly referable to the time when the movable kidney was first noticed.

These two observations led the author to think that hysteria might be referable to a movable kidney as cause.

"In reference to the combination of symptoms in hysteria, there is no disagreement among the authorities, but there is very considerable discrepancy in reference to its cause. Apart from the question as to whether hysteria is a disease of the whole nervous system (Scanzoni, Hasse, Niemeyer and others), or an exclusively cerebral disease (Wunderlich), Romberg refers it, as a reflex neurosis, to anomalies of the genital organs; others seek its cause in a disturbance of the nutrition of the nervous system in general (Niemeyer, Hasse and others), or caused by anæmia (Valentine); others give a large amount of influence to hereditary taint (Wunderlich, Amann)."

The author sides with Romberg.

The opponents of this view support themselves on observations of hysteria without at the same time visible disease of the genital organs, and on the continuance of hysteria after cure of the genital disease.

He does not consider these two arguments decisive. He allows that there are cases where hysteria may exist with a normal condition of the genitals, as in the two cases above mentioned; but he also considers that the presence of insignificant changes of posture in the uterus, as slight falling, predisposes to hysteria more than serious disease does, and yet they may

have passed by and been unknown or forgotten.

In cases where, after the cure of the uterine disease, the hysteria continues, an electric, dietetic or hydropathic treatment may produce favorable results. The author, however, has seen no case where the treatment of the hysteria was successful so long as the uterine disease continued uncured.

He then inquires how the existence of dislocated kidney in the two cases mentioned may be the cause of the persistence of the hysteria, whether of itself alone or by nervous connection with the genital organs.

"According to Frankenhäuser, a nervous network is formed by branches from the splanchnic nerves, from the first lumbar ganglion of the sympathetic, from the coeliac ganglia and the superior mesenteric plexus, with at least four ganglia, which are so grouped near the origin of the renal arteries that two lie near the aorta, one (ganglion renale primum) above, the other (ganglion renale secundum) below the renal artery.

"This under ganglion lying on the spot which must be first affected in dislocation of the kidney, sends branches to the deeper lying spermatic ganglion, and a large branch to the ovary. Into this nerve enter also branches from the spermatic ganglion.

"Concerning the function of the ovarian nerve hitherto almost nothing has been known. Experiments made by Frankenhäuser on the branches going from the spermatic ganglion have shown that irritation of these has caused contraction in the uterus, so that there are probably motor fibres remaining in these nerves; therefore very probably the fibres separating from the ganglion renale secundum, of which a part, as mentioned, enter the ganglion spermatica, are of motor nature."

The author has made experiments on rabbits by irritating the renal ganglia. He often obtained contraction of the uterus, but could not be certain that other nerves were not at the same time irritated. Taking away the other ganglia of the sympathetic, he obtained no contraction; but

possibly the renal ganglia were not uninjured. He then irritated the nervus ovaricus at a distance from its origin, avoiding as far as possible mistakes which might arise from entrance of air into the abdominal cavity. He irritated the nerve in its course and also its peripheric end in a rabbit a few days pregnant, and saw energetic contraction commence in the abdominal end of the fallopian tube and extend to the uterus, which could not be confounded with the sluggish contraction caused by the entrance of air into the peritoneal cavity.

In other experiments he obtained similar results, but not with such precision that he could feel justified in drawing his conclusions without reserve.

He concludes that "there is a direct nervous communication between the kidneys and the genital organs, i. e., it is certain that a ganglion, which, according to its position, belongs to the kidney, sends one or more branches to the ovaries. Irritation of the lower part of this nerve gives a positive result. The possibility is not excluded that the motor fibres running in this nerve come from the branches which pass into it from the ganglion spermaticum (which besides also receives branches from the ganglion renale secundum); yet it is very probable, considering their number and the above-mentioned functional harmony of both organs, that the nervus ovaricus is the means by which the intimate relations between the kidneys and uterus exist."

#### SHOULDER-TIP PAIN IN HEPATIC DISEASE.—

In a most elaborate paper on the Shoulder-tip Pain and other Sympathetic Pains in Diseases of the Liver, read at the meeting of the British Medical Association in August last, by Dr. Embleton, the learned author advances a new explanation of the nervous connection between the liver and the top of the shoulder. First stating that according to his experience, the shoulder pain occurs much more frequently than is supposed by some writers, he remarks that it is "referred especially to the angular space between the acromial end of the spine of the scapula and the adjacent end of the clavicle, where the upper and outer part of the trapezius muscle, as it goes to be inserted into the bones just named, is lodged;" and adds:—

"At this part, the external branch of the spinal accessory nerve, after having supplied the sterno-cleido-mastoid, and anastomosed with the second and third cervical nerves, enters the trapezius, forming a small plexus with twigs of the third and fourth cervical nerves, and is continued on along the vertebral border of the scapula, supplying the trapezius in its course, and communicating with twigs of the intercostal nerves."

It is noticed that this pain, when severe, extends from the shoulder-tip downwards to the lower angle of the scapula, and occasionally upwards along the side of the neck to the base of the skull, following the external branch of the spinal accessory nerve, which in such cases will be found tender to pressure, as will also the pneumogastric nerve of the same side. Pressure upon either of these nerves will sometimes aggravate the shoulder-tip pain, and, upon the vagus, will excite or increase pain in the liver.

"The course, distribution, and office of the external divisions of the spinal accessory appear not to be in doubt. That the internal division joins the trunk of the paravagus at the ganglion of the trunk, and contributes to the formation of the pharyngeal and laryngeal nerves with the vagus, is not doubtful; but we are ignorant as to how far the remaining part of the spinal accessory, which is incorporated with the vagus, goes along with it, and we do not accurately know to which organs it is finally distributed. These two points are of necessity, from the nature of the parts, of most difficult, if not of impossible, determination by the scalpel. By some anatomists, the spinal accessory portion of the vagus is believed to be given to the lungs, heart and stomach, which it is said to animate, more or less, with motor power (Hirschfeld and Leveillé, *Neurologie et Esthésiologie*, 2me edition, Paris, 1866, p. 218 et seq.) If this be true, there seems to be no reason why the liver, kidneys, and other parts—such as the supra-renal bodies, the pancreas and the small intestine—should not receive branches from the spinal accessory as well as from the vagus itself. In such case, we should have the seat of the sympathetic pain supplied by the external division, and the seat of disease in the liver supplied, in part at least, by the internal division of the same nerve—the spinal accessory—the two branches being in intimate connection beneath the skull. But, although it is probable that the internal branch of the spinal accessory is distribut-

ed to the same organs as the vagus itself, there are not as yet sufficient anatomical grounds for such a conclusion. It nevertheless appears that the par vagum, accompanied or not by the spinal accessory, does reach the liver, either directly from the gastric branches themselves, or indirectly from them through the great sympathetic ganglia; but the accounts of anatomists as to the mode and the amount of nervous supply to the liver, vary greatly from each other."

Numerous authors are cited to show the discrepancy referred to, though agreeing as to the main fact of the pneumogastric supplying the liver in some part at least.

The whole question of so-called sympathy between distant parts is one of much physiological interest, and every research is of value which tends to remove it from the domain of "vital" mystery and to confirm the law that sympathetic pain indicates nervous continuity.—*New York Med. Gazette.*

A BICEPHALIC MONSTROSITY.—M. R. HACKBORN, M.D., contributes the following to the *Medical and Surgical Reporter*:—

I desire to furnish to your numerous readers a brief general description of the latest great medical curiosity. The curiosity consists of a pair of twins, whose novel attachment to each other is exciting so much attention.

The twins at the present time are almost three weeks old. They measure nineteen inches in length from the crown of one's head to the crown of the other. Their weight at birth was ten pounds. They have fine, well-shaped heads, good features, light hair and dark eyes, good arms, and each a well-formed chest; but from one chest to the other there extends a common abdomen. At the middle of this abdomen is seen the one umbilicus for the two children, and running down from this to the mons veneris, on one side, is seen a fine line like a seam.

They are said to have a continuous spine from one occiput to the other, but the back I was not allowed to examine, and cannot therefore state positively. As they lie on their backs on a pillow, one head at one end and the other head at the other end, their faces looking toward each other, we find on one side of them each child has a perfect leg and foot, with the exception that one foot is in a condition of talipes varus. Between these hips appear the vulva and anus, the common outlets for

both. On the opposite side of the children, standing perpendicularly, is a deformity that seems to be a consolidation of the two legs on that side. It seems to have but one bone in the thigh, but two large bones, with a deep sulcus between, are found in the leg proper. The foot resembles the early blending of two feet, for two ossa calcis are seen, and eight toes, with the greater toes outermost, and the least ones side by side. Free motion at the attachment of this deformity to the body or bodies, but little motion in the knee, and still less in the ankle.

These babes had one cord and one placenta, and these not unusual in size.

Labor lasted only twenty-five minutes, and no doctor in attendance. They are separate beings, as manifested by their wills. Each is independent of the other, as shown by their performing different acts at the same time. One will go to sleep and the other remain awake. One nurses at one time and the other at another time, and the nursing of one does not satisfy the other.

When one has a passage from the bowels, the other does not seem to take any cognizance of it. They rest well, and as they seem to be in thriving condition, I have no doubt they will live, subject, of course, to the chances of life, just as other babies.

The family to which this curiosity came, lives ten miles south of Cardington, Warren county, Ohio.

The father, Mr. Finly, is a native of Pennsylvania, forty years old, and a man of rather inferior intellect. The mother is an Ohioan, thirty-three years old, and of average intellect. The parents have three children, the eldest being thirteen years old.

The mother says she never suffered from fright during her pregnancy, nor ever had any subject in her mind that might have had any influence on the contents of her womb. She is inclined to place the blame of their peculiar condition upon a fall she received when she was about two months advanced in pregnancy. The children at the latest accounts are prospering finely.

ANALGESIA IN VERTEBRAL CARIES, COMPARED WITH THAT IN HYSTERIA.—ROSENTHAL, the author, describes at length two cases of angular curvature, associated with chronic myelitis and local anaesthesia and analgesia. Charcot, in one case of hysteria with chronic contraction of the extremities,

has observed sclerosis of both lateral columns and disappearance of the anterior roots; all other observations in cases of hysteria have resulted negatively. The points of resemblance between hysteria and myelitis are:

1. Slight cases present only analgesia. As the intensity of the disease increases, anæsthesia is added, following a centrifugal course; and anæsthesia is usually the first to disappear during recovery. This coincides with what Schiff demonstrated as occurring after section of the gray substance, and with what the author himself has observed in a case of traumatic lesion of one lateral half of the cord, and two cases of vertebral caries with disease of the nerve-cells of the gray horns.

2. Anæsthesia and analgesia in hysteria always observe the limits which Voigt describes as bounding the cutaneous nervous ramifications. This is also the case in spinal paralysis.

Assuming that the spinal cord is the seat of the morbid processes which give rise to many cases of hysteria, we infer that simple diminution of the facility of transmission gives rise to analgesia, merely; that central lesions coincide definitely with peripheral; that anæsthesia and analgesia of the upper and lower extremities imply an affection not solely of the corresponding part of the posterior columns and gray matter, but *ex contiguo*, usually that of the gray mass of the anterior horns, and hence motor paralysis.—*Vierteljahrsschrift f. d. prakt. Heilkunde*.

**BLESSINGS ON THE DOCTORS.** By HENRY WARD BEECHER.—The Doctor's chaise! Well, what is there about it that differs from any other vehicle? It is built like all other chaises, and the horse was bought where other horses were bought, and the harness is not noticeable. And yet, do you ever see the doctor's chaise go by with the same feelings, or no feelings, with which you see others? I do not. Here he comes. His face is dull and careworn. The case is bad, undoubtedly. He has been out all night. May be, after a long and desperate fight, he is defeated. Or he sees it is a matter only of hours, and that defeat is certain. Or perhaps his face is cheery and smiling. Good news from the sick-room! The child has passed the crisis! The family are exultant, the doctor is radiant. Or, may be, he looks only fagged and weary. No very critical cases. A great many fussy maladies. Ride, ride,

ride, all day and half the night, without anything to excite, and everything to fatigue.

I wonder how doctors look at people on the street. Is their eye out for symptoms? Are men all medical specimens? Do they think of organs, of developments, of temperaments?

An artist would exclaim, "What a superb figure that is for a hero!" But the doctor is saying, is he not? "A splendid case for anatomy that body would make!" The artist: "What color! What a complexion?" The doctor: "That hectic contrast of white and red shows mischief is brewing."

I wonder if sextons look on the world with professional eyes? Do they listen to their minister with an under-thought of what a splendid funeral he would make? Do they take men's lengths as they meet them? Do they classify them as first-class coffin men, second-rate coffin men, cheap coffin men?

But to return to doctors. There stands the doctor's horse over the way. At just about the same hour it has been there for two weeks past. Who can be sick? The house looks cheerful enough outside. There is no sign of sadness. But inside—what is going on? We imagine all the supposable cases—the father, the mother, the little child, the grandmother? It's no use. The house is silent. All that we know is, that at about ten every morning the doctor's chaise stands before the house for about an hour, and its presence throws a shadow on the dwelling.

Blessings on the doctors? How they are pelted! How many squibs are fired at them! How many standing jokes and current stories are kept up at their expense! And yet, when a fellow is sick, he bundles all his stories and jokes out of the window, sends for his doctor, and protests that he feels better just to look upon him!

If the house is sad, if the trouble grows, if the flower of the family seems likely to be cut off, on the doctor leans the whole household. His coming and going are the sunrise and sunset of the day. His word is waited for as never were the responses of the Oracles. His reserve and anxiety infect the whole household. His surprise and exclamation of pleasure send exultation through every heart. For the hour he is as a god. And if recovery ensues, he is heaped with praises, and his fame spread abroad with willing tongues. But if, after a brave battle, watched unceasingly through day and night, he is overborne, all sympha-



thize with the friends, but how few think that the doctor needs pity, sympathy and comforting! And yet there are cases in which no one suffers so acutely as the physician, when the shadow falls and the light is gone out.

A good man adopts his patients. As long as they are in peril they belong to his household, even if they be uncouth and not lovely; but how much more when they are comely and lovable. He clings to a friend's child as if it were his own, and seeing afar off things which must happen, hidden from others, how often he carries fear and sorrow under a smiling face, and chokes down ill-omened words by words of simulated courage.

Blessings on the doctors. We think well of the country doctor's saddle-bags, and the city doctor's prescriptions. But far more are we in sympathy with the doctor's kind heart, his generous labor, his self-denying zeal, his gladness at others' joy, and his silent sorrow for others' sufferings and bereavement.—*New York Ledger*.

**OFFICIOUS PEOPLE.**—Officious people can never leave things alone. No one can possess his soul in peace or go his own way unhindered of them. They stand at the cross-roads of all men's lives, pointing out to them the path they ought to take, and, whether in religious faith or in house-furnishing, the choice of a wife or the pattern of a boot, have their word to say, their advice to give and their fingers to dip, whatever may be the pie that is making. Illness is one of their strong points, and if they hear that you are indisposed, whether slightly or gravely, they rush off to proffer advice, which you do not want and will not accept, and which probably would turn out a mistake if you did accept. Your disinfectant is not equal to theirs, and they have brought you the name and address of the chemist where you can get theirs. Your nurse does not know her business; let them send for one of their own choosing to-night. Your medical man says you are suffering from a certain form of illness. Well, of course he ought to know; but to the officious it seems very much like something else; or, if they do not go quite so far, they inquire, with the air of knowing all about it, whether he had not ordered such and such things to be done; and, if you say no, they urge you to have their own medical man without delay, as they are so sure yours is making a mistake. And so on, till they have worried you into a

fever; when they take their leave and bewail your obstinacy to the next comer. Any calamity is a god-send to them, for they have their innings when their neighbors are so prostrate by distress that they can buzz about them at their will. They are self-naturalized Samaritans, physicians without diplomas, ministers independent of orders or the Apostolic succession; and the unlucky ones whom it is their pleasure to assist must either keep them off with a strong arm, which may lead to a quarrel, or yield themselves helplessly into their active and officious hands.—*Pall Mall Gaz.*

**THE BRITISH MEDICAL JOURNAL** thus discourses of Dickens as an observer of disease and death:

"How true to nature, even to their most trivial details, almost every character and every incident in the works of the great novelist whose dust has just been laid to rest, really were, is best known to those whose tastes or whose duties led them to frequent the paths of life from which Dickens delighted to draw. But none, except medical men, can judge of the rare fidelity with which he followed the great Mother through the devious paths of disease and death. In reading *Oliver Twist* and *Dombey and Son*, or *The Chimes*, or even *No Thoroughfare*, the physician often felt tempted to say, 'What a gain it would have been to physic if one so keen to observe and so facile to describe had devoted his powers to the medical art.' It must not be forgotten that his description of hectic (in *Oliver Twist*) has found its way into more than one standard work, in both medicine and surgery (Miller's *Principles of Surgery*, second edition, vol. i. p. 111; also several American and French books); that he anticipated the clinical researches of M. Dax, Broca, and Hughlings Jackson, on the connection of right hemiplegia with aphasia (*vide Dombey and Son*, for the last illness of Mrs. Skewton); and that his descriptions of epilepsy in Walter Wilding, and of moral and mental insanity in characters too numerous to mention, show the hand of a master."

A DENTIST in Philadelphia has traced out the career of 1,000 dentists, with this result: 163 died before they reached middle life, 643 attained fair success, 57 made fortunes, 27 died from intemperance and other vices; 96 failed entirely; and 3 committed suicide.

## Medical Miscellany.

THE leading article in our first number of the new volume, which commences with the issue of next week, will be from the well-known pen of ALEXANDER YOUNG, Esq., and entitled Criminal Malpractice.

**EFFECTS OF GALVANIZING THE SYMPATHETIC NERVE.**—From numerous experiments in galvanizing the great sympathetic in the lower animals, M. C. Peyrani (*Gazette Médicale*) concludes that:—

1. The quantities of urine and of urea are increased in proportion as the strength of the voltaic current is augmented.
2. When galvanic currents of the same intensity are employed, the induction current produces a much greater elevation in the quantities of urine and of urea than the constant current.
3. If the sympathetic be divided, and not excited by galvanism, the quantities of urine and of urea are reduced to their minimum.
4. If the sympathetic be divided in the neck, and its peripheral end be galvanized, the quantities of urine and of urea descend much below the normal standard, although above the results obtained without section of the sympathetic.—*N. Y. Medical Gazette.*

**MANUFACTURE OF OZONE.**—Mr. Loew, of New York, has discovered that ozone is formed in rapid combustion. The German chemist, Carl Thaur, finds the observations of Mr. Loew to be correct.

A small quantity of ozone is always found in that part of the air which is immediately in contact with the lower part of the hydrogen flame, and its presence can be shown by drawing the air through a glass tube. The point of the tube ought to be inserted into the lower half of the flame, and the draft must be strong enough to divert the flame a little from the perpendicular, but not enough to draw the unconsumed gases through it, as they at once destroy the ozone. Burning charcoal yields no ozone, for the reason that the carbon absorbs both atoms of oxygen to produce carbonic acid. This method of the formation of ozone is of great interest, and may eventually lead to its practical application in bleaching and disinfecting. It would appear to be a cheaper and a better way to evolve the active oxygen than by electricity.—*Medical and Surgical Reporter.*

**INFLUENCE OF THE PANCREAS ON FAT.**—According to Dr. Dobell, "the influence exerted by the pancreas upon fats appears to be by breaking up the aggregation of the crystals of the fat, and altering its hydration. It alters the molecular condition of the fat, mingling it with water in such a way that even ether cannot separate the fat from the water. A permanent emulsion is thus formed ready to mix with a larger quantity of water whenever it may be added. The pancreas, therefore, in acting upon fat, does not decompose it into fatty acid and glycerine; the absence of glycerine from the watery stratum and the presence of

the glycerine in the pancreatized fat of the ethereal stratum having been demonstrated. It is well known that, in addition to the influence of the pancreas upon fat, it has the power of converting starch into glycose by simple mixture. This property remains to a certain extent after the pancreas has exhausted its property of acting upon fat. The quantity of pancreas that before mixture with fat will convert about eight parts of starch into glycose, after saturation with fat will convert about two parts of starch into glycose.—*Proceedings of the Royal Society, No. 97.*

**LOSS OF SPEECH AFTER CHLOROFORM.**—A servant girl, says the *Allg. Med. Centr. Zeit.*, for the sake of the extraction of a tooth, inhaled chloroform for a short time. On awaking, she had lost the power of speech, could not utter any sound whatever, and remained in that state for five weeks, in spite of various remedies, especially electricity. After this time she began to speak in a low tone, and was put under appropriate treatment. It is supposed that she suffered during anesthesia from rupture of some cerebral vessel.—*Detroit Review of Medicine and Pharmacy.*

The Title-page and Index of Vol. VI. have not been completed in season to accompany this number of the JOURNAL, and will probably be sent with next week's issue.

**PAMPHLETS RECEIVED.**—The "Rubber Air-Cushion" in the Treatment of Complicated Fractures and other Serious Injuries of the Lower Extremities, with Illustrative Cases. By L. D. Mason, M.D., New York. Pp. 12.

*Deaths in sixteen Cities and Towns of Massachusetts for the week ending Dec. 24, 1870.*

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston . . . . .	89	Consumption . . . . . 41
Charlestown . . . . .	8	Croup and Diphtheria . . 13
Worcester . . . . .	12	Pneumonia . . . . . 11
Lowell . . . . .	17	Typhoid fever . . . . . 10
Milford . . . . .	4	Scarlet fever . . . . . 9
Chelsea . . . . .	8	
Cambridge . . . . .	19	
Salem . . . . .	9	
Lawrence . . . . .	7	
Lynn . . . . .	5	
Gloucester . . . . .	4	
Fitchburg . . . . .	3	
Newburyport . . . . .	5	
Somerville . . . . .	3	
Fall River . . . . .	8	
Haverhill . . . . .	2	

203

GEORGE DERRY, M.D.,  
Secretary of State Board of Health.

**DEATHS IN BOSTON for the week ending Saturday, Dec. 24th, 80.** Males, 43; females, 46. Accident, 5; apoplexy, 2—disease of the bladder, 1—disease of the brain, 2—bronchitis, 1—congestion of the brain, 1—cancer, 3—consumption, 16—convulsions, 3—debility, 5—dropsy, 1—dropsy of brain, 2—diphtheria, 3—exposure, 1—erysipelas, 1—scarlet fever, 4—typhoid fever, 6—gangrene, 1—disease of heart, 7—laryngitis, 1—disease of the liver, 1—congestion of the lungs, 2—inflammation of the lungs, 2—marasmus, 1—old age, 2—pleurisy, 1—premature birth, 2—peritonitis, 1—puerperal disease, 1—rheumatism, 1—disease of the spine, 1—whooping cough, 1—unknown, 7.

Under 5 years of age, 26—between 5 and 20 years, 7—between 20 and 40 years, 21—between 40 and 60 years, 17—above 60 years, 19. Born in the United States, 60; Ireland, 22—other places, 7.

